Application No. 10/721,892
Response to Restriction Requirement mailed March 17, 2006
Atty. Dkt. No.: E072,1010.1

REMARKS

Restriction of Groups

In the Restriction Requirement mailed March 17, 2006, the Examiner indicated that there were thirty-one (31) Groups of claims. Applicants respectfully traverse this restriction, to the extent discussed below.

This application is the national phase entry of PCT GB/02/02563, and <u>no</u> unity of invention rejection was raised in that application. That a <u>31-way</u> restriction requirement should be raised in this case is extremely surprising, and is believed to be unnecessary.

Groups I through V relate to compounds per sc. The Examiner stated that the products of Groups I to V differ materially in structure and element, and has consequently identified five separate inventions, related to the compounds of Formula I in which the requisite nitrogen-containing ring (which also contains the integers X_1 to X_4), is tetrazole, 1,2,4-triazole, pyrazole, imidazole, and 1,2,3-triazole. Applicants consider these "five separate inventions" to be unified. That is, a prior art search that would identify compounds of Formula I in which the requisite nitrogen-containing ring is tetrazole would also identify compounds which are 1,2,4-triazoles, pyrazoles, imidazoles, and 1,2,3-triazoles. Applicants respectfully submit that the structures do not differ materially in structure and element because the relevant cyclic moiety (the ring containing X_1 to X_4) of the compound of Formula I:

- a) is a heterocycle;
- b) is a five membered ring;
- c) contains a nitrogen atom at the point at which it is attached to the rest of the compound of Formula I; and
 - d) consists of another four atoms that represent either nitrogen or carbon.

The relevant portion of the molecule (together with the rest of the molecule) therefore clearly represents a common/corresponding feature that distinguishes the relevant structures over the prior art, and represents a single invention.

Further, not only do the compounds have structural unity, but also, they are all effective and/or selective AT2 receptor agonists. The fact that pyrazole, imidazole, 1,2,4-

ä, *.*

Application No. 10/721,892 Response to Restriction Requirement mailed March 17, 2006 Atty. Dkt. No.: E072,1010.1

triazole, and tetrazole-based compounds are exemplified as being such agonists supports the fact that the 5-membered nitrogen-containing heterocyclic ring is, in this case, a single feature that cannot be dissected to form the basis of a Restriction Requirement.

While Applicants understand and appreciate that Restriction Requirements are occasionally appropriate, particularly where separate searches are required, Applicants respectfully do not see how this can be true of Claim 1 as currently pending.

With respect to the process claims, these appear to have been split into groups in a fashion that, respectfully, defices logic. The process of Claim 36 relates to processes for producing compounds of Formula 1, using compounds of Formula II, V, VII, and IX. The compounds of Formula II, V, VII, and IX differ only in that the intermediate functional group for preparing the R⁴ group in Formula I is specified as SO₂NH₂ in Formula II, CO₂H in Formula V, CO₂NII₂ in Formula VII, and NH₂ in Formula IX. The compounds in Claims 37-40 represent subsets of intermediates used to prepare the compounds of Claim 1. For the reasons stated above, Applicants believe that the compounds of Formula I do not require a separate search, as they are bound by a unity of invention. Similarly, the intermediates do not require a 20-way restriction.

Applicants understand the occasional need to separately search compound, process of preparation and method of treatment claims. However, for the Examiner to have provided a 20-way restriction (Groups XI-XXXI), to split the intermediates on the basis of a single functional group at the R⁴ position, seems to imply that no Markush group could ever be searched. That is, even if the restriction of the compounds of Formula I into five separate groups were proper, which Applicants assert is not, the twenty groups (Groups XI-XXXI) provided in the Restriction Requirement further split these five groups into 20 groups on the basis of a precursor to each of the R⁴ groups defined in Claim 1, that is coupled to a particular moiety to provide the R⁴ groups. Given the core structure, the Examiner's position is that it is absolutely necessary to perform a separate search for each precursor to the substituents at R⁴. This appears totally inconsistent with the restriction of Groups I through V, in that the individual R⁴ groups in Claim 1 were not subject to a similar restriction.

Application No. 10/721,892 Response to Restriction Requirement mailed March 17, 2006 Atty. Dkt. No.: E072,1010.1

Typically, if a compound is elected, some provision is made for the rejoinder of a method of treatment claim (typically limited to a single method of treatment) using the compound, whereas here, there is no such provision. The Restriction Requirement does provide that process claims which depend from or otherwise include all of the limitations of a patentable product will be entered as a matter of right, if presented before final rejection or allowance, whichever is earlier. In this context, the Examiner is encouraged to contact the undersigned attorney before a final action or an allowance is entered, such that suitable process claims can be provided. Additionally, the Examiner is encouraged to consider, and comment on the record, whether the structurally similar intermediates in Groups XI-XXXI will be considered for rejoinder, and if not, why not.

Applicants believe a more reasonable restriction might be drawn on the basis of a) the compounds per se, pharmaceutical compositions including the compounds, and the intermediates used to prepare the compounds, b) processes for preparing the compounds, and c) methods of treatment using the compounds.

The Examiner is encouraged to consider this or some other more reasonable means to restrict the claims that would not require the unduly burdensome filing of 31 separate applications to claim subject matter that the World Intellectual Property Organization considered a single invention. There must be a reasonable balance between the burden on the U.S. Patent and Trademark Office and the burden on the patent applicants. Where, as here, all of the compound share a common structural core and a common biological activity, and structurally similar intermediates are used to prepare the compounds, the division of the invention into 31 separate applications creates an undue burden on the Applicants (administrative and financial). If this Restriction Requirement is not reconsidered and revised, it will potentially create a similar administrative burden on the U.S. Patent and Trademark Office, particularly given the currently suggested revision to divisional practice by the U.S. Patent and Trademark Office which would require all divisional applications to be filed before the parent application issues.

Application No. 10/721,892 Response to Restriction Requirement mailed March 17, 2006 Atty. Dkt. No.: E072.1010.1

In summary, Applicants believe that this Restriction Requirement is far too restrictive, and that a broader search would not present an undue burden on the Examiner. Indeed, it did not present an undue burden during examination of the related PCT application.

Notwithstanding the traversal of the Restriction Requirement, Applicants have chosen to proceed with Group IV for prosecution in the present application, although if the Restriction Requirement is maintained, Applicants reserve the right to Petition that it be withdrawn.

The Restriction Requirement also required that Applicants elect a single elected species. In response, the elected species, found at page 34, lines 12 and 13 of the PCT application as originally filed, is provided below.

Application No. 10//21,892
Response to Restriction Requirement mailed March 17, 2006
Atty. Dkt. No.: E072.1010.1

Claims 2-4, 6-8, 28-31 and 36-41 have been indicated as "withdrawn," but are not cancelled, as the Restriction Requirement is being traversed. It is believed that the claims are currently in condition for examination on the merits, but reconsideration of the Restriction Requirement is respectfully requested before examination on the merits. A fee is due for this submission, for an extension of time for one month, to and including May 17, 2006. The Director is authorized to charge this fee, and any other fee that may be required, to Womble Carlyle's Deposit Account No. 09-0528.

Respectfully submitted,

Date: May 17, 2006

David S. Bradin (Reg. No. 37,783) Womble, Carlyle, Sandridge & Rice

P.O. Box 7037

Atlanta, GA 30357-0037 Office: 919-484-2382

Fax: 919-484-2084